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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/814,747

04/01/2004

Mithra M.K.V. Sankrithi

7215

7590

12/28/2006

Mithra Sankrithi  
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EXAMINER

WALTERS, JOHN DANIEL

ART UNIT

PAPER NUMBER

3618

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

12/28/2006

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/814,747

Applicant(s)

SANKRITHI, MITHRA M.K.V.

Examiner

John D. Walters

Art Unit

3618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 82-152 is/are pending in the application.
- 4a) Of the above claim(s) 93,94,100-102,108-111,127,128,134,142 and 146-152 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 82-92,95-99,103-107,112-126,129-133,135-141 and 143-145 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 October 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

Claims 82 – 92, 95 – 99, 103 – 107, 112 – 126, 129 – 133, 135 – 141 and 143 – 145 have been examined. Claims 1 – 81 have been canceled by Applicant. Claims 93, 94, 100 – 102, 108 – 111, 127, 128, 134, 142 and 146 – 152 have been withdrawn for being drawn to non-elected species.

### ***Election/Restrictions***

Newly submitted claims 93, 94, 100 – 102, 108 – 111, 127, 128, 134, 142 and 146 – 152 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

- Claims 93, 94 and 134, the left and right foot support connecting means being coupled, read on Species Group IX, Fig. 13a;
- Claims 100 – 102, having boot binding means on the left and right foot supports, reads on Species Group IV, Fig. 8;
- Claims 108 and 109, comprising telescoping means between the left and right ends of the handlebar and comprising folding means for folding the left and right ends of the handlebar together reads on Species Group XII, Fig. 14;
- Claim 110, providing a detachable connection between the ski and the lower post, read on Species Group X, Fig. 13b;
- Claims 111 and 142, wherein the lower post connecting means provides a connection with variable angle between the ski and the lower post, read on Species Group VI, Fig. 10;

- Claims 127 and 128, comprising hand control means, foot control means and braking control means, read on Species Groups XVI and XVII, Figs. 18 and 19;
- Claims 146 – 152, having pulley means and linking cable connecting the foot supports, having a rack and pinion means connecting the foot supports, having hydraulic linking tube connecting the foot supports and having pneumatic linking tube connecting the foot supports, read on Species Groups XIV, XVII and XVIII, Figs. 16, 19 and 20.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 93, 94, 100 – 102, 108 – 111, 127, 128, 134, 142 and 146 – 152 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

### ***Claim Objections***

Claim 138 and 139 are objected to because of the following informalities:

- Claims 138 and 139 state the limitation of a right and left “sprung coupling means.” It is assumed that Applicant intended to state “spring coupling means.” Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 83 and 84 are rejected under 35 U.S.C. 102(b) as being anticipated by Winchell (4,087,106). Winchell discloses a ski device comprising:

- a short downhill ski for sliding on a sliding surface (Fig. 17, item 350);
- said ski being a "water-ski", i.e. usable on water (Figs. 16 and 17)
- said ski being a snowboard, i.e. board which slides upon the snow (Fig. 17 and column 11, lines 63 and 64);
- said ski including a forward shovel (Fig. 17);
- said ski including sharp cornered edges (Fig. 17 and inherent in standard downhill ski manufacture);
- said ski being thicken near a location of a lower post than at locations near a forward and aft end (Fig. 17);
- said surface being a snow surface, i.e. a low friction frozen water surface (column 11, lines 63 and 64);
- a left foot support (Fig. 17, item 242");
- a left coupling means, i.e. connecting means, for permitting variable left spacing between said left foot support and said ski (Fig. 17, item 216");
- a right foot support (Fig. 17, item 240");
- a right coupling means, i.e. connecting means, for permitting variable right spacing between said right foot support and said ski (Fig. 17, item 214");
- wherein the longitudinal locations of said left foot support and said right foot support are at least approximately equal and overlap (Fig. 17);

- wherein right and left connecting means include right and left translational motion permitting means which allow for movement of said right and left foot supports (Fig. 11, items 222 and 224);
- handhold means (Fig. 17, item 208");
- wherein said handhold means comprises right and left handlebars and a connection between said handlebars (Fig. 17, un-numbered grips and item 208" between said grips);
- wherein said handlebars are contoured, i.e. curved (Fig. 17);
- a post including an upper post and a lower post connected by a upper post connecting means (Fig. 11, items 206, 207 and 209);
- wherein said lower post is connected to said ski by a lower post connecting means (Fig. 11, item 210);
- wherein said right foot support is located on a right side of said post (Fig. 17);
- wherein said left foot support is located on a left side of said post (Fig. 17);
- wherein said upper post connecting means comprises a telescopic slidable connecting between said upper and said lower posts and held by a "quick-release" mechanism (column 9, lines 10 – 15);
- wherein said right foot support, said left foot support and said handhold means are located above said ski (Fig. 17);
- wherein said handhold means is substantially rigid in pitch and yaw (Fig. 17).

In regards to claims 135 and 143 – 145, these are functional recitations, lacking in structure to distinguish the invention over the prior art, hence is given no patentable

weight provided only that the prior art can perform the function. The structure, as noted above, is capable of being used in the fashion recited in Applicant's claims.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 82, 85 – 89, 92, 95 – 97, 103 – 107, 112, 117 – 125, 132, 133, 138 and 139 are rejected under 35 U.S.C. 103(a) as being unpatentable over Winchell (4,087,106) in view of Barton et al. (3,338,589). Winchell discloses a ski device as described above. Winchell does not show the use of vertical spring force applied to said foot supports. Barton, however, discloses a ski sled comprising:

- right and left foot supports connected to a ski providing vertical spring force affected vertical movement (Fig. 6);
- said connection being made by mutually independent right and left spring coupling means (Fig. 7, item 48).

In regards to claims 89, 123, 124 and 139, these are functional recitations, lacking in structure to distinguish the invention over the prior art, hence is given no patentable weight provided only that the prior art can perform the function. The structure, as noted above, is capable of being used in the fashion recited in Applicant's claims.

it would have been obvious to one of ordinary skill in the art at the time the instant invention was made to combine the spring coupling means of Barton with the ski device of Winchell in order to provide adjustable runners which would tip into the snow surface at the uphill side of the slope to eliminate downhill side slip (column 1, lines 31 – 33).

Claims 90, 91 and 126 are rejected under 35 U.S.C. 103(a) as being unpatentable over Winchell (4,087,106) in view of Barton et al. (3,338,589) as applied to claims 82, 85 – 89, 92, 95 – 97, 103 – 107, 112, 117 – 125, 132, 133, 138 and 139 above, and further in view of Rygiel (4,773,659). Winchell in view of Barton does not make use of a spring acting between a post and a ski. Rygiel, however, discloses an articulated ski comprising:

- a spring acting between a lower post and a ski (Fig. 7, item 21);
- a damper acting between a lower post and a ski (Fig. 7, item 71).

In regards to claim 126, it would have been obvious to one of ordinary skill in the art at the time the instant invention was made to place said spring at any appropriate place along said post, as it has been hold that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

It would have been obvious to one of ordinary skill in the art at the time the instant invention was made to combine the spring and damper of Rygiel with the ski device of Winchell in view of Barton in order to reduce the recoil amplitude of the



steering shaft if the user ceases placing input energy into a “bouncing” motion (column 4, lines 59 – 61) and to reduce noise (column 5, lines 33 – 35).

Claims 98 and 99 are rejected under 35 U.S.C. 103(a) as being unpatentable over Winchell (4,087,106) in view of Barton et al. (3,338,589) as applied to claims 82, 85 – 89, 92, 95 – 97, 103 – 107, 112, 117 – 125, 132, 133, 138 and 139 above, and further in view of Brown (2,593,974). Winchell in view of Barton does not make use of a partially enclosed foot plate. Brown, however, discloses a ski sled comprising:

- a foot plate (Fig. 3, item 30);
- said foot plate including foot enclosing surfaces (Fig. 3, items 45 and 32).

It would have been obvious to one of ordinary skill in the art at the time the instant invention was made to combine the foot plates of Brown with the ski device of Winchell in view of Barton in order to securely and snugly hold various sized shoes (column 2, line 53 to column 3 line 1).

Claims 113 – 116 are rejected under 35 U.S.C. 103(a) as being unpatentable over Winchell (4,087,106) in view of Barton et al. (3,338,589) as applied to claims 82, 85 – 89, 92, 95 – 97, 103 – 107, 112, 117 – 125, 132, 133, 138 and 139 above, and further in view of Hunter (5,096,217). Winchell in view of Barton does not show specific detail of said ski's geometry and construction. Hunter, however, discloses a ski comprising:

- a front and a rear shovel (Fig. 2, items 8 and 9);

- a camber (Fig. 2, item 11);
- a low friction running surface (column 9, line 64 to column 10, line 7);
- outwardly concave edges (Fig. 3).

It would have been obvious to one of ordinary skill in the art at the time the instant invention was made to combine the ski physical structure of Hunter with the ski device of Winchell in view of Barton in order to provide the usage characteristics of said ski (column 7, lines 20 – 28; column 7, lines 50 – 58; column 9, line 64 to column 10, line 7; and column 5, lines 1 – 4).

Claim 129 is rejected under 35 U.S.C. 103(a) as being unpatentable over Winchell (4,087,106) in view of Barton et al. (3,338,589) as applied to claims 82, 85 – 89, 92, 95 – 97, 103 – 107, 112, 117 – 125, 132, 133, 138 and 139 above, and further in view of Sullivan et al. (6,929,267). Winchell in view of Barton does make use of a safety strap. Sullivan, however, discloses a snow scooter comprising:

- a safety strap (Fig. 1, item 56).

It would have been obvious to one of ordinary skill in the art at the time the instant invention was made to combine the safety strap of Sullivan with the ski device of Winchell in view of Barton in order to secure said device to a user should said user fall from said device (column 7, lines 16 – 21).

Claim 130 is rejected under 35 U.S.C. 103(a) as being unpatentable over Winchell (4,087,106) in view of Barton et al. (3,338,589) as applied to claims 82, 85 –

89, 92, 95 – 97, 103 – 107, 112, 117 – 125, 132, 133, 138 and 139 above, and further in view of Monreal (4,678,445). Winchell in view of Barton does make use of a tow cable engagement means. Monreal, however, discloses a snow sled comprising:

- a tow cable engagement means (Fig. 3, item 20).

It would have been obvious to one of ordinary skill in the art at the time the instant invention was made to combine the tow cable engagement means of Monreal with the ski device of Winchell in view of Barton in order to provide a tow in the event of an equipment failure during use that would cause the user to want to return to a repair installation without having to use the steering or other features of said device required in its usual performance.

Claim 131 is rejected under 35 U.S.C. 103(a) as being unpatentable over Winchell (4,087,106) in view of Barton et al. (3,338,589) as applied to claims 82, 85 – 89, 92, 95 – 97, 103 – 107, 112, 117 – 125, 132, 133, 138 and 139 above, and further in view of Geary (6,783,134). Winchell in view of Barton does make use of chairlift engagement means. Monreal, however, discloses a ski vehicle comprising:

- a chairlift engagement means (Fig. 20, item 270).

It would have been obvious to one of ordinary skill in the art at the time the instant invention was made to combine the chairlift engagement means of Geary with the ski device of Winchell in view of Barton in order to provide support to said vehicle while a user is returning to the top of a ski-run (column 6, lines 51 – 56).

### ***Response to Arguments***

Applicant's arguments with respect to claims 1 – 81 have been considered but are moot in view of the new ground(s) of rejection as necessitated by Applicant's amendment.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

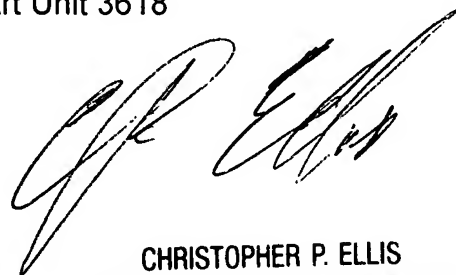
Any inquiry concerning this communication or earlier communications from the examiner should be directed to John D. Walters whose telephone number is (571) 272-8269. The examiner can normally be reached on Monday - Friday, 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Ellis can be reached on (571) 272-6914. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

John D. Walters  
Examiner  
Art Unit 3618

JDW



CHRISTOPHER P. ELLIS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600

Revised for  
Entry.  
JW 20 Dec 06

# REPLACEMENT SHEET

**Figure 24A**

